erating expense (Item 46) from $17.07 per car, to $13.64 (or less than the average revenue under the Cummer Scale of $15.12). This correction, if carried throughout the entire formula to the end, would reduce the so-called "Total Cost Per Car" (Item 49) from $24.69, to $19.73.

Even with this correction, the non-haulage expense is subject to the further objection that it assumes that log traffic incurs as much terminal expense per car-mile as any other freight, which, of course, is obviously not true, because the carrier has practically no special terminal expenses or investment for log traffic. On the log trains the Commission found that "practically the only service performed * * * is the road haul" (R. 58). Patently the cost of $6.46, with approximately 45 per cent of that amount added for taxes and return on investment, is absurdly erroneous for terminal and yard expenses in connection with moving a car of logs in Florida.

Turning now to the haulage expenses computed by the Commission, we find that the Commission, having used the per loaded-car basis in determining non-haulage expense, shifted its method to the gross ton-mile basis in determining the haulage expenses. This shifting of methods would have the effect of augmenting the apparent haulage expense attributable to any heavy-loading freight, just as it would have the effect of minimizing the haulage expenses of commodities whose average loading per car is very light.

In this determination the total haulage expenses of all freight (omitting the few trifling and inconsequential items to which we have above referred) are divided by the gross ton-miles of all freight handled on the system upon the theory that the cost of hauling one ton of one commodity one mile is the same as the cost of hauling a ton of any other commodity one mile, regardless of the nature of the commodity, the length of haul, the average load, the hazard, the special services required for safe transportation, the volume or regularity of movement, or any other circumstances of the movement. In other words, the theory as-

sumes, contrary to the fact, that the cost of transporting one ton of logs is the same as the cost of hauling a ton of perishable fruit and vegetables, or high-valued merchandise, or any other freight.

Not only does this theory give no consideration to the foregoing matters, but it is also directly contrary to the accepted and established principle that the carload is the unit of freight transportation and its cost.

The cost of hauling a car containing 30 tons is certainly not twice the cost of hauling a car containing 15 tons.

The Interstate Commerce Commission has recognized for this reason that in comparing rates for transporting articles of different and varying average loadings, the car-mile revenue figures present a far better basis than ton-mile revenue. *Investigation & Suspension Docket 26, 26-c*, 22 I. C. C. 604, 620.

The average loading of all freight on the Atlantic Coast Line in 1929 was 15.6397 tons to the car (Item 24 of Appendix E), whereas the average loading of the log cars was 56,754 pounds, or 28.377 tons (Item 38 of Appendix E). Thus, the use of the gross ton-mile theory of computing haulage costs attributes nearly twice as much expense to the handling of the average car of logs as to the average car of all freight.

The use of these theories in the manner they were used by the Commission produces a purported cost for handling logs which is far above the actual average cost of handling all freight. To demonstrate this we shall use the same basic figures and compute the purely system-average cost of handling all freight per car-mile.

The total freight operating expenses for 1929 (Item 1 of Appendix E) were $36,308,813

The total loaded car miles of all freight handled on the system in that year (Item 23 of Appendix E), was ..... 209,835,784 miles

Dividing the total miles into total expenses gives an average operating expense per loaded car-mile of.....$.173.

Applying this figure per loaded car-mile to the average loaded car movement of the log cars, 81.36 miles, gives a total operating expense (on a purely system average), of $14.08

If we omit from the above figure the amount of money estimated in Appendix E (Item 18) as the excess of handling less-than-carload freight over and above the expense of carload freight, the figure of $.173 per loaded car-mile would be reduced to .....$.161

And the average operating expense per car for 81.36 miles would be $13.10

These operating expenses are purely system average and compare with the operating expense which the Commission has purported to compute (Item 46 of Appendix E) of $17.07

We have observed that the Commission has deducted certain trifling and inconsequential operating expenses as having no relation to log traffic (Items 2 to 15 of Appendix E). While these deductions by no means represent the true deductions which should be made for log traffic, and without attempting to make any corrections of the Commission's figures in this respect, we take off the same amounts which the Commission deducted. This leaves a total average loaded car-mile expense of.....$.155

And multiplying this by a haul of 81.36 miles, we have the total operating expense per car of.....$12.61

Thus, if the Commission's formula were founded upon a loaded car-mile basis throughout, the average expense per car, using average costs per unit, would be reduced from $17.07, to $12.61. The average expense per car of $12.61 is $2.51 per car less than the average revenue per car of

$15.12 under the Cummer Scale. In other words, the Cummer Scale under this system average cost computation yields approximately 20 per cent more than the average expense per car.

We call attention to the fact that in every instance shown above the loaded car-mile expense as determined above includes all expenses attributable to empty car return movements.

The Commission's formula adds $1.99 per car as an apportionment of taxes, and $5.63 per car as an apportionment of 5.75 per cent return on total investment, and arrives at "total cost per car" of..... .....$24.69

The term "total cost per car" is a misnomer. This is not the cost per car, but is the estimated revenue per car which would be required under the Commisson's theory to yield, on the log traffic, its full proportionate share of taxes and return on investment, or profit. Obviously, a figure which is designed to yield expenses plus taxes and full profit, cannot rightfully be called "the total cost per car".

The Commission's basis of apportionment for taxes and profit is based upon "investment" (as the term is used in Appendix E) and taxes for both passenger and freight operations, regardless of whether passenger operations are making or losing money upon the "investment" and taxes properly attributable to them. Furthermore, the apportionment assumes that the log traffic should pay an equal ratable share of the return on the "investment" and taxes thereon, whether it in anywise uses the expensive terminal and other "investments" or not.

Thus it will be noted that under the Commission's formula for apportionment of taxes, the log-shipper, on traffic utilizing the least expensive of taxable property, would be required to pay 11.67 cents for taxes on each dollar of operating expense (Item 47 of Appendix E), and would be required to pay 32.97 cents profit to the carrier upon each

dollar of operating expense (Item 48 of Appendix E). This aggregates 44.65 per cent of the operating expense. This aggregate percentage for taxes and profit is so high as to appear to us erroneous upon its face.

The total freight revenue of the carrier in 1929 (R. 1134a), was $53,188,639.00

The total loaded car miles of all freight (Item 23 of Appendix E) were ..... 209,835,784 miles

This produces a revenue per loaded car-mile for all freight carried in the year, of ..... $.253

The rate here prescribed applied to the average log car of 56,754 pounds, moving 81.36 miles, produces a revenue per loaded car-mile, of ..... $.384

The incongruity of logs producing 50 per cent more per car-mile than the average of all freight is apparent.

It is manifest that the computation of costs made by the Commission is basically and fundamentally unsound.

The Congress, in Amending Section 15a in 1933, Did Not Impose An Affirmative Duty Upon the Commission to Prescribe Rates so as to Provide a Fixed Return, and Did Not Follow the Recommendations of the Commission as to the New Law to be Substituted for Former Section 15a.

The Commission, in its Appendix E formula, and in the minimum rates prescribed for Florida intrastate log traffic, has proceeded upon the assumption that the old section 15a of the Act makes it the Commission's affirmative duty to prescribe intrastate rates on a single commodity on a single line of railroad in a single state which would yield, based upon average system costs, *at the very least*, a minimum revenue which would represent the expense of the service plus its share of all taxes and 5.75 per cent profit on investment.

Section 15a, as amended in 1933, wipes out the affirmative duty which was imposed upon the Commission under old 15a to adjust the rates of carriers as a whole or in rate groups so that the carriers would earn a profit upon investment. In the amendment the Congress took away, not only this duty, but the "heart" of the plan for recapture of excess earnings. Congress put in its place merely a statement of a new set of "factors", among others, to which the Commission "shall give due consideration" in the exercise of its powers to prescribe just and reasonable rates. The first of these is the "effect of rates on the movement of traffic." This factor was not mentioned in old 15-2 (3). The second factor in the new 15a is the need of adequate service *at the lowest cost.* The third factor is the need of revenue sufficient to provide service at the lowest cost. These changes conformed to matters of common knowledge that the transportation facilities are more than adequate to meet the needs of the country and that the time has come for restriction and withdrawal of unnecessary facilities, rather than the "enlargement" of the facilities.

Amended 15a is substantially different from the legislation proposed to Congress by the Interstate Commerce Commission as a substitute for old 15a. In its 46th Annual Report to Congress, December 1, 1932, the Commission said (page 18):

> It is our view, therefore, that section 15a should be remodeled to fit the conditions which actually beset the railroad industry, instead of the theoretical conditions which were assumed when its present provisions were made law. We renew our recommendations that the recapture provisions be repealed from the beginning, and that for the present rule of rate making in that section a simple rule be substituted which will make it clear that in regulating the general level of rates we shall always keep in mind and be guided by the need for producing, so far as possible, revenues which are sufficient for the maintenance of an adequate national railway transportation system, and also recognize the

principle that the railroads may justly earn a surplus in time of prosperity to offset deficiences in times of depression.

The Commission, in the same report, again referred to the special report upon this subject which it had rendered to Congress and which was set forth in the annual report for 1931, at pages 107-110 and in Appendix G thereto. In that Appendix G, which includes the Commission's proposed amendment to Section 15a the method of determining value as a rate basis is set up in great detail which "the Commission shall from time to time * * * determine * * * for each operating carrier" * * * (which place the affirmative duty upon the Commission so to do). Among the "factors" to be considered by the Commission in adjusting the general level of rates under its proposed bill were (1) the transportation *needs* of the country, (2) the necessity of maintaining railroad credit to attract capital and (3) the necessity of furnishing transportation "at the lowest rates consistent with adequate service and the meeting of the transportation needs". Having thus determined the factors and needs the Commission, under its proposed bill, was to "endeavor to adjust the general level of rates" so that the carriers as a whole, or in each rate group, would earn, as nearly as may be, a fair return." (Pages 362-63-64, I. C. C. An. Rep. Dec. 1, 1931.)

The Commission's amendment to old Section 15a leaves no question as to the plain intention to place the affirmative duty upon the Commission to so adjust the general rate level. The Commission's proposed amendment, (p. 364) further provides that:

> "The fact that such aggregate net railway operating income falls below such amount in times of economic depression or rises above it in times of economic prosperity shall not necessarily be regarded as a reason for raising or reducing rates, as the case may be; but THE DUTY of the Commission in the exercise of sound discretion SHALL BE to maintain so far as

possible a general level of rates which over a period of years will produce earnings consistent with the principles, above set forth, to be observed in the determination of the fair return; and the commission SHALL INITIATE, MODIFY, ESTABLISH, or ADJUST rates to the extent that it may find necessary in the full performance of the foregoing DUTY."

The Commission's recommendations to Congress on this subject of repeal of or amendment to section 15a were consistently renewed through 1930, 1931 and 1932 and up until the time that the Act was amended in the spring of 1933.

It will be noted that the Commission's proposed amendment to former Section 15a made no substantial change with respect to its affirmative duty to adjust the rates as a whole or in the several rate groups, and to provide full profit on investment and maintain railroad credit. It will be noted farther that the amendment enacted by Congress differs substantially from the bill recommended to Congress by the Commission. The amended section does not set up the elaborate rate-base recommended by the Commission, does not include "railroad credit", among the factors to be considered, and does not place the affirmative duty upon the Commission to fix the general level of rates of the carriers as a whole or in rate-groups.

Respectfully submitted,

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APPENDIX E.

Estimated cost of transporting logs in Florida for average distance of 81.36 miles, based on A. C. L. average costs per unit for calendar year 1929 applied to the average units involved in hauling logs in that State

BASIC DATA

Operating expenses:			
1. Total freight service operating expenses			$36,308,813
Expenses not involved in handling log traffic:			
Maintenance of way and structures:			
2. No. 241. Wharves and docks		$135,980	
3. No. 201. Superintendence (proportion), 5.334 per cent × $135,980		7,253	
Maintenance of equipment:			
4. Nos. 323 and 324. Floating equipment—Repairs and depreciation		33,481	
5. No. 301. Superintendence (proportion), 3.845 per cent × $33,481		1,287	
Traffic:			
6. No. 352. Outside agencies	488,740		
7. No. 353. Advertising	4,579		
8. No. 354. Traffic associations	46,802		
9. No. 356. Industrial and immigration bureaus	16,637		
		556,758	
10. No. 351. Superintendence (proportion), 81.94 per cent × $556,758		456,246	
Transportation—Rail line:			
11. No. 408. Operating floating equipment		33,543	
12. No. 371. Superintendence (proportion), 4.392 per cent × $33,543		1,473	
13. Total		1,226,021	
General expenses:			
14. Proportion applicable to above items—4.490 per cent × $1,226,021		55,048	
15. Total expenses not involved			1,281,069
16. Net freight-service operating expenses			35,027,744

Apportionment between haulage and nonhaulage expenses	Haulage expenses	Nonhaulage expenses
17. Net freight service operating expenses, apportioned 76.3539 per cent to haulage and 29.6461 per cent to nonhaulage, based on proportions obtained from those of "Maintenance of way and structures" and "Transportation Rail line" accounts, which are segregated between road or haulage and yard or nonhaulage expenses (*see* testimony, Witness Pettijohn, R. 1465)	$24,643,384	$10,384,360
18. Deduction for excess terminal expense (platform and clerical) incurred for less-than-carload over that incurred for carload freight, estimated at 75 per cent of accounts 373, "Station employees," and 376, "Station supplies and expenses" ($3,407,704 x 75 per cent)		2,555,778
19. Net amounts applicable to carload traffic	24,643,384	7,828,582

20.	Gross ton-miles	11,600,829,000
21.	Average haulage expense per gross ton-mile	$0.0021243
22.	Revenue ton-miles	3,281,770,000
23.	Loaded-car miles (revenue and nonrevenue)	209,835,784
24.	Revenue tons per loaded-car mile (revenue and nonrevenue)	15.6397
25.	Total revenue tons carried	18,951,802
26.	Total loaded cars carried (revenue and nonrevenue)	1,211,775
27.	Average nonhaulage expense per loaded car	$6.46
	Taxes:	
28.	U. S. Government (corporation income)	$370,076
29.	Other than U. S. Government (State taxes)	$5,669,924
30.	Total taxes	6,240,000
31.	Total operating expenses (freight and passenger)	53,431,589
32.	Taxes per dollar of operating expense	$0.11678
	Interest on investment at 5.75 per cent:	
33.	Property investment as of December 31, 1929	$306,439,250
34.	5.75 per cent interest on investment	$17,620,257
35.	Interest on investment per dollar of operating expense	$0.32977
	Statistical data for log traffic in Florida:	
36.	Average revenue per car under so-called Cummer scale	$15.12
37.	Average distance hauled (miles)	81.36
38.	Average billing weight (pounds)	56,754.
39.	Average tare weight of car (pounds)	33,000.
40.	Average tare weight of car, empty haul (pounds)	33,000.
41.	Gross weight (pounds)	122,754.
42.	Gross weight (tons)	61.377
43.	Gross ton-miles per car (61.377 gross tons x 81.36 miles)	4,994.

COMPUTATION OF COSTS

Estimated cost per car of hauling logs in Florida based on A. C. L. average costs per unit:

	Operating expenses:		
44.	Haulage expenses: 4,994 gross ton-miles x $0.0021243 per gross ton-mile	$10.61	
45.	Nonhaulage expenses: Average per loaded car	6.46	
46.	Total operating expenses		$17.07
47.	Taxes: $17.07 (operating expenses) x $0.11678 (taxes per dollar of operating expenses)		1.99
48.	Interest on investment at 5.75 per cent: $17.07 (operating expenses) x $0.32977 (interest per dollar of operating expenses)		5.63
49.	Total cost per car		24.69
50.	Cost per 100 pounds		4.37 cents
51.	Average revenue (Cummer scale) per car of logs for average haul of 81.36 miles		15.12

(186 I. C. C. 197.)